

## Product datasheet for MR209076L4V

## OriGene Technologies, Inc.

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## **Gpc3 (NM\_016697) Mouse Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Gpc3 (NM\_016697) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Gpc3
Synonyms: OCI-5

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_016697 **ORF Size:** 1740 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR209076).

OTI Disclaimer:

Sequence:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 016697.2

RefSeq Size: 2272 bp
RefSeq ORF: 1740 bp
Locus ID: 14734
UniProt ID: Q8CFZ4
Cytogenetics: X A5







## **Gene Summary:**

Cell surface proteoglycan that bears heparan sulfate (By similarity). Negatively regulates the hedgehog signaling pathway when attached via the GPI-anchor to the cell surface by competing with the hedgehog receptor PTC1 for binding to hedgehog proteins (PubMed:18477453, PubMed:23665349). Binding to the hedgehog protein SHH triggers internalization of the complex by endocytosis and its subsequent lysosomal degradation (PubMed:18477453). Positively regulates the canonical Wnt signaling pathway by binding to the Wnt receptor Frizzled and stimulating the binding of the Frizzled receptor to Wnt ligands (By similarity). Positively regulates the non-canonical Wnt signaling pathway (PubMed:15537637). Binds to CD81 which decreases the availability of free CD81 for binding to the transcriptional repressor HHEX, resulting in nuclear translocation of HHEX and transcriptional repression (PubMed:23665349). Inhibits the dipeptidyl peptidase activity of DPP4 (By similarity). Plays a role in limb patterning and skeletal development by controlling the cellular response to BMP4 (PubMed:10964473). Modulates the effects of growth factors BMP2, BMP7 and FGF7 on renal branching morphogenesis (PubMed:11180950). Required for coronary vascular development (PubMed:19733558). Plays a role in regulating cell movements during gastrulation (By similarity).[UniProtKB/Swiss-Prot Function]